Fifth Set of Information Requests by
the Department of Public Service
on Vermont Electric Power Company, Inc.

Docket 6860

List of References to Question No. 60

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Disclaimer: All cost estimates in this spreadsheet are VELCO's "best faith" estimates but all are subject to change.
These cost estimates are relative, not absolute as this spreadsheet was created for comparison purposes only.
All costs common to all options have *NOT* been included.

New Haven to Queen City Cost Comparison for Various Options

	1 Reconductor 34.5 kV (1) Other LV improvements *No 115 kV added*			2 NRP as Proposed 115 kV line replaces LV line *N. Haven to Q. City*			3 115 kV routing alternate N. Haven to Williston to *Q. City* Reconductor LV (2)			4 NRP Proposed Reroute per VELCO supplemental prefiled testimony filed 2/06/04		
	PTF	Non PTF	Total	PTF	Non PTF	Total	PTF	Non PTF	Total	PTF	Non PTF	Total
Idealized Costs												
1 115 kV line construction	$0	$0	$0	$7,000,000	$0	$7,000,000	$7,000,000	$200,000	$7,200,000	$6,825,000	$0	$6,825,000
2 LV line reconductor/ rebuild	$0	$2,260,000	$2,260,000	$0	$0	$0	See below * $0	$2,260,000	$2,260,000	$0	$0	$0
3 BED Upgrades (3)	$0	$1,090,000	$1,090,000	$0	$0	$0	$0	$0	$0	$0	$0	$0
4 QC to Williston becomes PTF	$0	$0	$0	See below *			See below *			See below *		
5 Substation Upgrades (4)	*($350,000)*	*$500,000*	*$150,000*	*$5,600,000*	*$5,200,000*	*$11,800,000*	*$3,400,000*	*$500,000*	*$3,900,000*	$7,600,000	$5,500,000	$13,100,000
6 Caps and other substation improvements (5)	$0	$990,000	$990,000	$0	$0	$0	$0	$990,000	$990,000	$0	$0	$0
7 ROW purchase from GMP	$0	$0	$0	$2,500,000	($2,500,000)	$0	$0	$0	$0	$2,500,000	($2,500,000)	$0
7(a) Spare Verg's 115/34.5 kV xformer (13)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
7(b) 34.5 kV line at Vergennes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$100,000	$100,000
7(c) place holder item	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
8 Subtotal of above	($350,000)	$4,750,000	$4,400,000	$13,100,000	$2,700,000	$18,800,000	$10,400,000	$3,950,000	$14,350,000	$16,925,000	$3,100,000	$20,025,000
9 Total projected Vermont loss costs using option 2 as a base (6a)	(0.88 MW)	$3,520,000		(base)	$0		(.38 MW)	$1,520,000		(0.07 MW)	$280,000	
Projected GMP loss costs (included in total above)(6b)	(0.18 MW)	$720,000		(base)	$0		(.16 MW)	$640,000		(03 MW)	$120,000	
10 Total Cost - W/O PTF Treatment (items 1 thru 10 above)		$7,920,000			$18,800,000			$15,870,000			$20,305,000	
11(a) **Idealized Cost to all Vermont Ratepayers (7a)**	($15,750)	$2,800,000	$2,784,250	$724,500	$0	$724,500	$468,000	$880,000	$1,348,000	$761,625	$160,000	$921,625
11(b) **Cost to only GMP Ratepayers (7b)** (GMP non-PTF items 1 thru 10 above)		$4,470,000	$4,470,000		$2,700,000	$2,700,000		$4,590,000	$4,590,000		$3,220,000	$3,220,000
11(c) **Cost to only BED** *Ratepayers (7c)* (BED items 1 thru 10 above)		$1,090,000	$1,090,000		$0	$0		$0	$0		$0	$0
11(d) **Total Costs With PTF Treatment**			$8,254,250		$0	$3,424,500		$0	$5,938,000			$4,141,625
Additional Costs to Implment												
12 Land purchase costs	Same order of magnitude as other options.			Same order of magnitude as other options.			Same order of magnitude as other options.			Same order of magnitude as other options.		
13 Additional ROW easement costs ncle (8)												
14 Mitigation Costs (Cable or?) (9)												
15 Condemnation Costs												
16 Other (12)												
17 **Additional Cost to Vermont Ratepayers** (items 12 thru 16 above)	Unknown			Unknown			Unknown			Unknown		
18 **Additional potential cost if** *PTF funding not achieved due to* delay related to condemnation or legal issues (10)	*$0*			Unknown			Unknown			Unknown		

VELCO Notes: The cost estimates in this spreadsheet are VELCO's "best faith" estimates but are all subject to change. They are based on the best estimate known to date.

* **With both options where the NRP is built (Option 2 and 3), the Queen City to Williston 115kV line could go from being non-PTF to PTF. That means the costs will be borne differently after the NRP is built.**
Today, there is approximately $2M on VELCO's books today for that line.
After the NRP is built, Vermont's share of that $2M could go to 4.5% of $2M or $90,000.
However, VELCO is uncertain with regard to Option 3's connectivity at Williston and therefore, quite unsure as to the PTF treatment of some portion of the $7,000,000.

1) Reconductor as required to attain 1200 MW design goal to complete "5 th path" to Essex area
VELCO Notes: There is only one study done that involves reconductoring GMP 34.5kV. It is the Chittenden County East study by EPRO. Both sets of reconductoring costs (option 1 & 3) are a composite of that study and information received directly from GMP. This does not provide the same level of reliability to GMP as the NRP.

2) Reconductor as required to serve loads between N Haven and Q City thru 2011 time period or achieve loss benefits
VELCO Notes; See comment on 1 above.

3) To provide adequate performance for BED equivalent to proposed NRP option, please list improvements and gains afforded
VELCO Notes:
BED is not provided with the same level of reliability as with the NRP
Cost is based on estimates given by BED to the DPS for a new 13.8kV circuit from QC to hospital and a backup transformer and associated improvements at QC. This is a "minimal" solution.

4) Upgrades from N Haven to Q City to accommodate 115 kV
VELCO Notes: Credit for Option 1 represents less upgrades at NH. NH assumed constant in all options therefore not in costs. Option 3 assumes improvements at QC but no changes at Williston

5) To provide adequate performance to others equivalent to proposed NRP option, please list improvements and gains afforded
VELCO Notes:
Capacitors at Charlotte, Ferrisburg and Vergennes (per GMP)

6a) Incremental Vermont losses over NRP option as a base using $4000 per peak KW and calculated through load flows

6(b) **Incremental GMP losses over the NRP option using $4000 per peak KW**

7(a) Calculated assuming 4.5% of PTF costs are paid by all Vermont Ratepayers

7(b) **Costs assumed by only GMP ratepayers - they would also have their load ratio share of total VT costs**

7(c) **Costs assumed by only BED ratepayers - they would also have their load ratio share of total VT costs**

8) Payments to property owners to obtain new easements
VELCO Notes: VELCO has no "good faith estimate of nominally expected costs"

9) Costs of alternate means such as under grounding or other special means to settle easement issues or local concerns, assume that these are "localized costs"
VELCO Notes: Unable to provide "best good faith estimate of nominally expected costs". Although we have a very preliminary cost per mile (for 115kV), at this time there is no estimate on how many miles, if any, there would be of under grounding.

10) Risk assessment cost assuming that PTF funding is not extended beyond 2007 and delays prevent construction to be completed by 2007 end
VELCO Notes: Unable to provide "best good faith estimate of nominally expected costs"

11) **VELCO Notes: In light of the DPS' request to use "best good faith estimates of nominally expected costs" - VELCO does not believe it can, in good faith, estimate mitigation costs, condemnation costs, and for that matter, the land and ROW costs.**

12) **VELCO Notes: "Other" includes additional regulatory, legal, environmental, additional clearing VELCO does not believe it can, in good faith, estimate any of these costs at this time.**

New Haven to Queen City Option Comparison				
	1 Reconductor 34.5 kV Other LV Improvements No 115 kV added	2 NRP as Proposed 115 kV line replaces LV line N. Haven to Q. City	3 115 kV routing alternate N. Haven to Williston to Q. City Reconductor LV	4 NRP Proposed Reroute per VELCO supplemental prefiled testimony filed 2/06/04
1 State load level at which local load is served reliably	Unknown	1200 MW	1200 MW	1200MW
2 State load level at which "bulk" VELCO system reliability is maintained	1200 MW	1200 MW	1200 MW	1200MW
3 Number of lines req'd in existing NH to Williston corridor for extending capability beyond 1200 MW	2	1	2	1
4 Condemnation likely required? (To what extent?)	YES	YES	YES	YES
5 Other Issues? (see footnote below)	See response	See response	See response	See response
6 Estimated "Idealized" Cost to Vermont ratepayers	$2,784,250	$724,500	$1,348,000	$921,625
GMP Only costs	$4,470,000	$2,700,000	$4,590,000	$3,220,000
BED Only costs	$1,000,000	$0	$0	$0
Total Cost to All Vermont (With PTF)	**$8,254,250**	**$3,424,500**	**$5,938,000**	**$4,141,625**
7 Estimated Cost Adders to above "Idealized" Cost (line 1?)	Unknown	Unknown	Unknown	Unknown
8 Estimated Potential PTF "Risk" Cost Adder	$0	Unknown	Unknown	Unknown

Other issues

Option 1:
GMP would likely have the same ROW/easement issues as VELCO would have along the existing corridor (including costs, condemnation, litigation, etc.)

Option 3:
Refer to DPS2-VELCO-50, DPS1-VELCO-6, and DPS1-VELCO-10 for discussion on the feasibility of this option
GMP would likely have the same ROW/easement issues as VELCO would have along the existing corridor (including costs, condemnation, litigation, etc.)